

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Rules and Regulations Implementing the)	
Telephone Consumer Protection Act of 1991)	
)	
Petition for Declaratory Ruling of All About the)	CG Docket No. 02-278
Message, LLC)	
)	
To: The Commission)	

**COMMENTS OF DAVID FRANKEL IN RESPONSE TO DA 17-368 RE:
PETITION FOR DECLARATORY RULING OF
ALL ABOUT THE MESSAGE, LLC**

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EXECUTIVE SUMMARY

Petitioner All About the Message, LLC (AATM) has asked for a declaratory ruling or, alternatively, a retroactive waiver regarding the applicability of the TCPA to AATM's "direct to voicemail" message delivery service.

In this reply, I will provide:

- I. A perspective on the merits of the direct to voicemail message delivery service
- II. A technical overview of how such a service operates
- III. Regulatory implications for the direct to voicemail message delivery service
- IV. Recommendations for the FCC (and others) in responding to the petition

By way of background, I am a telecommunications entrepreneur and technical expert with a depth of knowledge that includes call signaling, robocalling and PSTN information services. I own and operate ZipDX LLC, a Silicon Valley-based business that provides specialized telephone and web-centric meeting services.

I. The Merits of Direct to Voicemail Message Delivery

The petition states on page 11 (emphasis in original, footnotes omitted):

"[t]he TCPA is designed to protect individual consumers from receiving intrusive and unwanted telephone calls." The TCPA was enacted to "protect the privacy interests of residential telephone subscribers by placing restrictions on unsolicited, automated telephone calls to the home and to facilitate interstate commerce by restricting certain uses of facsimile machines and automatic dialers." The TCPA was enacted in response to an increasing number of consumer complaints arising from the increased number of telemarketing calls. "In particular, Congress reported, '[m]any consumers are outraged over the proliferation of intrusive, nuisance [telemarketing] calls to their homes.'" Comments made on the Senate floor by the TCPA's sponsor, Senator Hollings, reflect the intended scope of the Act: "Computerized calls are the scourge of modern civilization. They wake us up in the morning; they interrupt our dinner at night; they force the sick and elderly out of bed; they hound us until we want to rip the telephone right out of the wall."

The Petitioner apparently believes that its service is somehow completely distinct from that which the TCPA intended to restrain, when in fact theirs is just another species in the same genus.

Consider how this service might be used; this is important so that consideration of the petition has some end-user context. (The petition itself, on page 16, notes the Ninth Circuit's promotion of context and common sense.) Admittedly, this is only my own speculation, which I contend is close to representative of the truth but which Petitioner can rebut should it prove off the mark.

- 1) A car dealer has a profitable business selling extended warranties and desires to market said policies to past visitors to its service department.
- 2) Car dealer engages AATM to deliver a sales pitch, unsolicited, to the voicemailboxes associated with the telephone numbers that visitors have left as part of obtaining service for their vehicles.
- 3) For purposes of illustration, imagine that the extended warranty has a selling price to the consumer of \$1,000 and a profit to the car dealer of \$400. Imagine that AATM charges the car dealer 5 cents for every message successfully delivered, and that AATM's cost for each of those messages is 1 cent. And imagine that AATM can successfully deliver 10,000 messages from the telephone number list provided to it by the car dealer. Lastly, imagine that 5 consumers to whom the message is delivered opt to buy the extended warranty.
- 4) AATM spent \$100 to deliver the messages; it charged the car dealer \$500 for a profit of \$400. The car dealer had a gross profit of \$2,000 on the five warranties it sold, less the \$500 expense to AATM, for a net profit of \$1,500. So AATM is happy with their

profit, the car dealer is happy with their profit, and presumably the five people that bought the warranty are happy with the peace of mind they get from their new plan.

Everybody is happy in this scenario, EXCEPT the 9,995 people that got a message in their voicemailbox that they didn't sign up for, didn't want, and had to waste time listening to or at least determining that it was worthy of deletion. Some of these people are indifferent; many are annoyed; some are furious. Having already expended time and energy they will never get back, few or none will invest further time and energy to complain to the FCC. I write on their behalf.

Ideally, the car dealer wouldn't undertake such an offensive campaign. And ideally the free market would cause consumers to take their business elsewhere if they were truly bothered by the actions of the car dealer and their partner AATM. But it isn't so simple. If I get a recall notice from my vehicle's manufacturer, my first instinct will be to go to the nearest dealer where I give up my telephone number details not knowing that I'll be harangued by undesired voicemails in the future. The next-closest dealer may be some distance away; even if I'm aware of the first dealer's marketing practices, I don't have time to take my car to, and retrieve my car from, a distant city.

The petition suggests on page 16 that the direct-to-voicemail approach is preferable to autodialed (traditional) telephone calls. I would suggest, similarly, that fingernails on a chalkboard are preferable to a sharp stick in the eye. However, I think that most consumers would choose "none of the above" with respect to all four attacks.

II. Technical Overview of Direct to Voicemail Delivery

While the petition presents selected technical details in support of their request, they have failed to provide a comprehensive, detailed explanation of the technology used and how it

behaves. Again, in the interest of context, I will discuss how their service COULD be implemented and with that background examine it against the TCPA and other FCC rules. And again, the petitioner can correct my errors.

For a conventional phone call, subscriber A (calling from number A) places a call to subscriber B (at number B). If the call goes unanswered (because the subscriber himself does not respond to the alerting signal, or the subscriber's line is in a busy state, or, especially in the case of a mobile subscriber, the subscriber's terminal device is not visible to the network), and subscriber B's service includes network-based voicemail, the call will be "forwarded" to a third number, C, which is a number assigned by the voicemail service provider for that purpose and is programmed into B's service when the voicemail capability is established. The industry often refers to these services as Call Forward No Answer and Call Forward Busy (CFNA and CFB, respectively); these are features built into mobile and landline switching systems.

Forwarding, in this case, means that Subscriber B's service provider will establish a second call from B to C, and bridge the first call (from A to B) to that second call. When the second call is placed, the signaling information will typically indicate that it is "from" A (that is, it will show that A is the calling party), but it will include an additional information element indicating that the call has been "redirected" by B.

When the call is received by C (the voicemail platform), it inspects the signaling information to identify the "redirecting party". In this case, that is B; the voicemail system accesses B's voicemail box, plays the associated greeting, and captures a message on behalf of B.

This voicemail architecture allows the number C to be used by any number of voicemailboxes. D can call E and the forwarding call can then be placed to that same number C; the redirecting number will identify the call as destined for E's mailbox.

To deliver a message directly to B's mailbox, one need only place what looks like the "forwarding call" in the scenario above. The direct to voicemail service initiates a call directly to C, but includes B as the redirecting number. When C gets that call, it processes it as if it were forwarded from B, giving the caller the ability to deposit a message into B's mailbox.

It should be noted that there are variants on this depending on the technical details. The terminology above assumes legacy PSTN signaling (called SS7 signaling). If SIP (IP-based) signaling is used, the term "redirecting number" is replaced with "diversion" but the behavior is the same. And in most systems, if the "redirection number" or "diversion" information is not included in the call signaling data, then when the call arrives at C, the voicemail platform will request (or allow) that the mailbox number (B, in my example) be transmitted using DTMF (telephone keypad) digits (which can be sent automatically by the direct to voicemail service).

Thus, we see that through one or another of these variants, a voicemail message can be delivered directly to a subscriber's mailbox by placing a call to C, where C is the telephone number associated with that subscriber's voicemail platform.

In times past it might have been challenging to learn, for any given subscriber (that is, any given telephone number B), what is the associated voicemail access number C? Now, in the Internet age, this is trivial. One first accesses the telecommunications industry LNP (Local Number Portability) and LERG (Local Exchange Routing Guide) databases to learn the service provider servicing number B. Then, one uses information from a website like

http://www.cellularbackdoor.com/vm_numbers.shtml to find C. These steps can be automated such that they occur in a fraction of a second for negligible cost.

In examining this universe of “cellular back door” voicemail access numbers (numbers C in my scenario above), we find that each major provider has a somewhat different scheme.

Examples:

- T-Mobile’s is simplest; they have a single number that covers their entire US subscriber base. (It’s 805-MESSAGE, or 805-637-7243).
- AT&T has different numbers in each state (e.g., in MN the number is 708-828-0220).
- Sprint uses the first six digits of the subscriber’s (B’s) number (NPA-NXX in industry parlance) plus MAIL (6245).

Once a message has been received for a subscriber (whether via the conventional scenario where the original call was placed to B, or in my “direct to voicemail” scenario where a single call is placed directly to C), most of the voicemail platforms will alert the subscriber in some way. This may be a “message waiting” symbol appearing on the user’s phone display, or a vibration and/or flashing light and/or audible tone.

III. Regulatory Implications of Direct to Voicemail Delivery

Within the TCPA, there are at least six pitfalls for this service – despite Petitioner’s contention that they comply.

First, on page 7, the petition states (footnote omitted):

The TCPA proscribes the use of certain automated equipment “to make any call (other than a call made for emergency purposes or made with the prior express consent of the called party) . . . to any telephone number assigned to a paging service, cellular telephone service, specialized mobile radio service, or other radio common carrier service, or any service for

which the called party is charged for the call” The statutory structure and the Commission’s implementing regulations are clear: TCPA liability exists only when an autodialed or prerecorded call is made to the mobile telephone number of a consumer or a telephone number of another wireless service for which the consumer is charged. Voicemail service, and the process by which voicemail is deposited on a carrier’s platform for subsequent access by a subscriber, is neither a call made to a mobile telephone number nor a call for which a consumer is charged, and, indeed, is a service that is not regulated at all.

If the service functions as I have described above, the petitioner’s conclusions are incorrect.

The voicemail access numbers (numbers C in my technical description) are, according to the LERG, “assigned to a . . . cellular telephone service.” The T-Mobile number I referenced is assigned to “T-MOBILE USA, INC” and the AT&T Minnesota number is assigned to “NEW CINGULAR WIRELESS PCS, LLC”. Thus, the TCPA proscribes calling these numbers using automated equipment.

The petitioner might argue that these particular numbers, while assigned to cellular service PROVIDERS, are not actually used by designated cellular service SUBSCRIBERS. One must ask what exactly is meant by “assigned to a cellular telephone service.” I believe that historically, that phrase has always been interpreted to mean that the number is served by a mobile operator and is designated in industry databases as a mobile service. The numbers are treated as wireless numbers for other regulatory purposes (such as access charges); regulatory consistency demands the same for TCPA. If the petitioner believes some different interpretation is appropriate, they should explain and indicate how that determination would be made (what databases or other processes would be used, if not the ones that have been described here).

Second, the Petitioner claims that the subscriber (B) incurs no charge for these messages. Page 11 states that the service “does not result in a charge to the consumer for the delivery of the voicemail.” But what does “delivery” mean? The first step of this service is depositing the message into the subscriber’s mailbox, but the obvious next step is when the subscriber connects

to the voicemail system. That is when the message is actually “delivered” and that is the end result that AATM promotes to its customers.

The petition proudly notes, in exhibits A and C, that “67% of cell owners find themselves checking their phone for messages, alerts or calls - even when they don't notice their phone ringing or vibrating!”

The petition explains on page 9: “Consumers may then retrieve the messages from the voicemail service provider, often by dialing a separate phone number and entering a password.” Depending on their service plan, this may result in an explicit charge to the subscriber, or the depletion of minutes from their usage plan. More specifically and annoyingly, a roaming subscriber could incur significant charges for “delivery” of a marketing message they don’t want. If I am roaming in France, and suddenly see that I have a new voicemail message, my instinct is to place a call to retrieve that message. I’ll incur roaming charges in France for that call.

Third, the petition claims in several places that their service is “non-intrusive”. On page 15, they state: “Business should be permitted to communicate with consumers in a non-intrusive manner by inserting voicemail messages directly on voicemail...” But at the very bottom of the AATM home page (<http://www.abtmmessage.com/home.html> viewed on 24-April 2017 at 10:30 AM PDT), they state (grammatical errors from the original): “We call our service Ringless Voicemail, because that has been the industry wide standard name given to this type of service. For most carriers, there will be absolutely no signal or ringing of their phone, however the carrier will sometimes ring a phone but this is just a signal not an actual call a cannot be answered. The message will be dropped into the end users Voice Mail box. Some carrier systems are more difficult to get into the Voice Mail boxes, however the transmission that creates the ring is not a phone call.” The petition’s claims about non-intrusiveness are contradicted by the admission

here. And as I noted in my technical description above, the act of depositing a message into a subscriber's mailbox typically results in some sort of notification to the subscriber. The whole point is to get their attention and encourage them to listen to the message.

Fourth, there is the matter of the Do-Not-Call list. Certainly at least some, if not all, of the voicemail access numbers (numbers C in my technical description) are on this list. As examples, the two numbers (one for T-Mobile and another for AT&T) highlighted in the technical description have been on the DNC list since 2005.

The TCPA specifically forbids calls to "residential" numbers on the DNC list; the petitioner might argue that these numbers are not residential numbers. But the FCC and the FTC have allowed and encouraged the addition of wireless numbers to the DNC list; there is no filed tariff for wireless service and no regulatory distinction is made between residential and business wireless service. Further, I do not find a reference to "residential" in the FTC's TSR, which also addresses the applicability of the DNC list (in addition to the FCC's TCPA).

The petitioner should not be placing automated calls to numbers on the Do-Not-Call list.

Fifth, if the petitioner is placing calls that include "redirecting number" or "diversion" signaling information that is inaccurate (that is, the call was not actually redirected or diverted from the signaled number), that is a form of caller-ID spoofing and hacking. This violates FCC regulations for truth-in-Caller-ID and mandated practices for call signaling.

Sixth, the petitioner at page 5 claims that the FCC lacks authority to regulate voicemail as an information service. The Commission cannot set rates or regulate the operation of voicemail. But when that service is accessed via a telephone call over the Public Network, the FCC's regulations apply to the call itself. Even in the early days of voicemail, the necessary call-forwarding

features (CFDA, CFB) were tariffed telecommunications; the voicemail functionality itself was the “information service.”

The telephone call placed by the direct to voicemail service to the voicemail platform must comply with the FCC’s regulations applicable to the Public Network, including call signaling rules and the TCPA.

IV. Recommendations for the FCC (and others) in Responding to the Petition

The FCC should not grant either of the petitioner’s requests. I respectfully suggest that the FCC take this opportunity to remind the petitioner and others of the following:

- A) Automated calls to numbers assigned to wireless service providers are not permitted without prior express permission.
- B) Automated calls to numbers on the Do-Not-Call list are not permitted without prior express permission.
- C) Transmitting inaccurate call signaling information is not permitted.
- D) PSTN applications which, as part of their operation, create collateral damage in the form of numerous annoyed customers are not justified even if a small handful of people benefit.

In addition, the wireless operators might consider technical modifications to their platforms to eliminate or limit the ability of third parties to deposit messages into their voicemail platforms. For example, they could make the systems only reachable from certain networks, and/or they could rate limit the number of messages they will accept from any given caller. (This latter approach could be defeated with caller-ID spoofing, but that’s illegal.)

Wireless operators (and other voicemail platform operators) might take this opportunity to formally notify AATM and their vendor Stratics Networks that the “direct to voicemail” service is not appreciated by the majority of the operators’ subscribers and that AATM and Stratics should cease and desist from accessing their platform, and that henceforth such access will be considered unauthorized and a form of hacking.

Respectfully submitted,

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/s/ David Frankel

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